What is claimed is:

1. A method for forming at least one multilayered base having a predetermined pattern on at least one surface of a multi-surfaced LTCC module which has a stack of ceramic layers fired at a first, cofired temperature, comprising the steps of:

applying a plurality of metal layers in one or more predetermined patterns on one or more said surfaces;

firing said module, as predetermined said layers are applied, at a second temperature lower than said first, cofired temperature but of a value to partially sinter said metal layers; and

firing said module, after a last of said metal layers is applied, only once at an elevated temperature greater than said second temperature to fully sinter said metal layers.

2. A method according to claim 1 which includes the step of:

firing said module with said metal layers at said second temperature of around 650° C.

3. A method according to claim 1 which includes the step of:

firing said module with the last applied said metal layer at said elevated temperature in the range of around 800° C to 850° C.

4. A method for forming at least a first multilayered base having a first predetermined pattern on at least one surface of a multi-surfaced LTCC module which has a stack of ceramic layers fired at a first, cofired temperature, comprising the steps of:

applying to at least one said surface a first metal adhesion layer having said first predetermined pattern;

applying one or more intermediate metal layers on said first adhesion layer;

firing said module after each said applied intermediate layer at a second temperature lower than said first, cofired temperature but of a sufficient value to partially sinter said intermediate layers;

applying a first top metal layer to the last applied said intermediate layer; and

a) if no further bases are to be applied, firing said module at an elevated temperature greater than said second temperature to fully sinter all said metal layers; or

b) if further bases are to be applied, firing said module at said second temperature to partially sinter said first top metal layer;

said metal layers on said first surface forming a first base for receiving a first predetermined component.

5. A method according to claim 4 which includes the steps of:

firing said module with said first top metal layer, at said second temperature; and forming a second said base on a second said surface by

applying to said second surface a second metal adhesion layer having a second predetermined pattern;

applying one or more intermediate metal layers on said second adhesion layer;

firing said module after each said applied intermediate metal layer at a second temperature lower than said first, cofired temperature but of a sufficient value to partially sinter said intermediate metal layers of said second base;

applying a second top metal layer to the last applied said intermediate metal layer; and

a) if no further bases are to be applied, firing said module at an elevated temperature greater than said second temperature to fully sinter all said metal layers of said first and second bases; or

b) if further bases are to be applied, firing said module at said second temperature to partially sinter said second top metal layer;

said metal layers on said second surface forming a second base for receiving a second predetermined component.

6. A method according to claim 5 which includes the steps of:

firing said module with said second top metal layer, at said second temperature; and forming a third said base on a third said surface by

applying to said third surface a third metal adhesion layer having a third predetermined pattern;

applying one or more intermediate metal layers on said third adhesion layer;

firing said module after each said applied intermediate metal layer at a second temperature lower than said first, cofired temperature but of a sufficient value to partially sinter said intermediate metal layers of said third base;

applying a third top metal layer to the last applied said intermediate metal layer; and

a) if no further bases are to be applied, firing said module at an elevated temperature greater than said second temperature to fully sinter all said metal layers of said first, second and third bases; or

b) if further bases are to be applied, firing said module at said second temperature to partially sinter said third top metal layer;

said metal layers on said third surface forming a third base for receiving a third predetermined component.

7. A method according to claims 4, 5 or 6 which includes the step of:

firing said module at a said second temperature of around 650° C.

8. A method according to claims 4, 5 or 6 which includes the step of:

firing said module at a said elevated temperature in the range of around 800° C to 850° C.

9. A method according to claims 4, 5 or 6 which includes the step of:

firing said module at a said elevated temperature equivalent to said first, cofired temperature.

10. A method according to claims 4, 5 or 6 which includes the step of:

applying at least one said adhesion layer before said stack of ceramic layers are cofired.

11. A method according to claim 4 which includes the step of:

applying a frame member as said first component to said first base.

12. A method according to claim 5 which includes the step of:

applying a heat sink member as said second component to said second base.

13. A method according to claim 6 which includes the step of:

applying an electrical connector member as said third component to said third base.

14. A method for forming at least a first multilayered base having a first predetermined pattern on at least one surface of a multi-surfaced LTCC module which has a stack of ceramic layers fired at a first, cofired temperature, comprising the steps of:

applying a plurality of metal layers, including a first top metal layer, in a first predetermined pattern to build up the thickness of said base, and firing said module after application of predetermined ones of said metal layers at a second temperature lower than said first, cofired temperature, but of a value to partially sinter said metal layers; and which includes the step of

screening on at least one said metal layer and allowing it to dry and then applying a subsequent metal layer, prior to said firing; and

a) if no further bases are to be applied, firing said module at an elevated temperature greater than said second temperature to fully sinter all said metal layers; or

b) if further bases are to be applied, firing said module at said second temperature to partially sinter said first top metal layer;

said layers on said first surface forming a first base for receiving a first predetermined component.

15. A method according to claim 14 which includes the steps of:

firing said module with said first top metal layer, at said second temperature; and forming a second said base on a second said surface by

applying a plurality of metal layers, including a second top metal layer, in a second predetermined pattern to build up the thickness of said second base, and firing said module after application of predetermined ones of said metal layers at a second temperature lower than said first, cofired temperature, but of a value to partially sinter said metal layers; and which includes the step of

screening on at least one said metal layer and allowing it to dry and then applying a subsequent metal layer, prior to said firing; and

a) if no further bases are to be applied, firing said module at said elevated temperature to fully sinter all said metal layers of said first and second said bases; or

b) if further bases are to be applied, firing said module at said second temperature to partially sinter said second top metal layer;

said layers on said second surface forming a second base for receiving a second predetermined component.

16. A method according to claim 15 which includes the steps of:

firing said module with said second top metal layer, at said second temperature; and forming a third said base on a third said surface by

applying a plurality of metal layers, including a third top metal layer, in a third predetermined pattern to build up the thickness of said third base, and firing said module after application of predetermined ones of said metal layers at a second temperature lower than said first, cofired temperature, but of a value to partially sinter said metal layers; and which includes the step of

screening on at least one said metal layer and allowing it to dry and then applying a subsequent metal layer, prior to said firing; and

a) if no further bases are to be applied, firing said module at an elevated temperature greater than said second temperature to fully sinter all said metal layers of said first, second and third bases; or

b) if further bases are to be applied, firing said module at said second temperature to partially sinter said third top metal layer;

said layers on said third surface forming a third base for receiving a third predetermined component.

17. A method according to claims 14, 15 or 16 which includes the step of:

firing said module at a said second temperature of around 650° C.

18. A method according to claims 14, 15 or 16 which includes the step of:

firing said module at a said elevated temperature in the range of around 800° C to 850° C.

19. A method according to claims 14, 15 or 16 which includes the step of:

firing said module at a said elevated temperature equivalent to said first, cofired temperature.

20. A method according to claim 14 which includes the step of:

applying a frame member as said first component to said first base.

21. A method according to claim 15 which includes the step of:

applying a heat sink member as said second component to said second base.

22. A method according to claim16 which includes the step of:

applying an electrical connector member as said third component to said third base.